A Method and Structure for Integrated Circuit Interference Isolation Enhancement

ABSTRACT OF THE DISCLOSURE UNDER 37 C.F.R. §1.72(b)

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A structure and method for the improvement of interference isolation using distributed broadband technology. This structure uses signal processing across a distributed network in order to optimize the isolation of a signal of interest when noise, interference and crosstalk signal sources are present. The structure is designed so that a signal arrives at a node in the network via more than one path and is summed in a correlated or in-phase manner. Each signal path is designed so that the signal phase may be modulated to create the in-phase summing. Noise sources that arrive at the network node are added in an uncorrelated or out-of-phase manner. Therefore, the combination of the signal adding coherently and the interference adding with an uncorrelated phase improves the signal to interference ratio. This type of structure may be applied in an RF power amplifier application in order to provide an improved interference or crosstalk signal ratio.